

Kinetic Harvester

Abstract of the Disclosure

A Kinetic Harvester is disclosed, including a central shaft connecting two large disks like wheels and an axle. Four long cylindrical arms radiate from the middle of the central shaft and end even with the edges of the disks. Four main
5 braces connect the edges of the disks and the ends of the arms butt into them. A smaller secondary brace runs from the ends of the arms around the circumference of the structure. Two large flat panels are attached to the each arm so that they are able to open and close like a book. There are stops running across the inner surfaces of
10 the disks, down the central shaft and down the inner surfaces of the main braces. When the panels are opened they come up against the stops and are prevented from bending backward. The secondary brace runs between the panels when they are closed and prevents them from both swinging the same way. Springs are mounted on the secondary braces where the panel frames close on them. The springs help to start
15 the opening of the panels. All the panels are mounted on the same sides of the arms so that they all open clockwise or all counterclockwise. When the Kinetic Harvester is installed in a current the water pushes its way between the panels that have loose edges facing into it forcing them open. The material in the centers of the panels are pushed back into a concave shape that offers maximum resistance to the current. On
20 the other side of the Harvester where the loose sides of the panels face away from the current the force of the water squeezes the panels together offering a minimum of resistance to the current. The difference in resistance turns the Harvester around its central shaft. As the Harvester rotates each set of panels opens and closes in turn as they come into the different positions relative to the current. If the current
25 reverses as it would in waves or surf, the panels would open and close on opposite sides of the Harvester and it would keep harvesting power. The rotation of the Harvester can be transmitted to a generator.